

Effect of Customer Relationship Management on Customer Satisfaction in SMEs Business

Amadhea Yudith Eryanti¹, Gallang Perdhana Dalimunthe²

¹Master of Business Administration Program, Bandung Institute of Technology, Indonesia, amadhea06@gmail.com

²Master of Business Administration Program, Bandung Institute of Technology, Indonesia, gallang.dalimunthe@sbm-itb.ac.id

Corresponding Author: amadhea06@gmail.com¹

Abstract: This study examines the effectiveness of Customer Relationship Management (CRM) in a single F&B business that attracts a high number of first-time visitors yet struggles to convert them into repeat customers. The study aimed to analyze the relationship between CRM dimensions, customer satisfaction, and customer retention and identify the CRM dimension that shows the weakest performance. A quantitative approach was applied. Data from 100 respondents were collected through a structured Likert-scale survey measuring three CRM dimensions-Customer Knowledge Management (CKM), Customer Interaction Management (CIM), and IT-CRM-along with customer satisfaction and retention. The dataset was analyzed using Partial Least Squares-Structural Equation Modeling (PLS-SEM) to evaluate both direct and indirect effects within the proposed model. The results show that all CRM dimensions exert a significant positive influence on customer satisfaction, with CKM emerging as the strongest predictor, followed by CIM and IT-CRM. Customer satisfaction, in turn, positively affects retention intention, confirming the mediating role of satisfaction within the CRM-retention relationship. Among the CRM dimensions, IT-CRM received the lowest performance scores, indicating that digital enablement and CRM-related technology represent the weakest capability within the firm and require priority improvement. These findings emphasize the importance of strengthening CRM dimensions-particularly CKM and IT-CRM-to enhance customer satisfaction and reinforce retention intentions. The study contributes empirical evidence to CRM research within small F&B contexts by demonstrating how different CRM components influence satisfaction-driven loyalty outcomes and by highlighting the specific capability gaps that hinder the firm's ability to retain customers effectively.

Keywords: customer retention, customer satisfaction, CRM dimensions, quantitative analysis, PLS-SEM.

Received: June 21, 2024;
Revised: July 15, 2024;
Accepted: August 19, 2024;
Published: August 30, 2024;
Curr. Ver.: August 30, 2024;



Copyright: © 2025 by the authors.
Submitted for possible open
access publication under the
terms and conditions of the
Creative Commons Attribution
(CC BY SA) license
(<https://creativecommons.org/licenses/by-sa/4.0/>)

1. Introduction

Business owners today are faced with an increasingly dynamic and saturated market landscape. The Bandung Tourism and Culture Office (2023) reported more than 5.300 Food & Beverage businesses operating in the city, with a 12% annual growth in new openings since 2021. This value exceeds demand as population growth only increased by 2.1% annually (BPS Jawa Barat, 2023), resulting in market saturation and heightened competition. In highly saturated markets, emerging businesses face significant challenges, evidenced by a 70% failure rate within the first year. This is often driven by intense competition from rapidly growing rivals and difficulties in sustaining customer retention, whether through innovative product differentiation or targeted marketing strategies.

As brands compete by diversifying their menus, promotions, and customer experiences, consumers are presented with a growing number of attractive choices. A 2023 survey by Kadin Bandung revealed that only 20% of customers revisit the same F&B outlet within three months, decreasing from 35% in 2020 (Kadin Bandung, 2023). The survey also found that consumers are overwhelmed by the abundance of options, with 60% of responders citing “there are many tempting offered elsewhere” as a reason for switching brands. These figures reflect the difficulty of retaining customer attention in a market overflowing with alternatives.

Given these market conditions, many business owners attempt to adapt by intensifying their market efforts (ex., allocating larger budgets, reducing profit margins, increasing advertising spending, and offering frequent promotions), often without clear insights into which channels effectively drive customer engagement. Customer acquisition costs for F&B businesses rose by 25% from 2021-2023 (Euromonitor International, 2023).

Based on the empirical model searched by Min et al. (2016), it is cheaper and easier to keep customers than to attract switchers. The results suggest that when a business offers a higher incentive to acquire customers to enhance its market position, other businesses may match these incentives, thereby increasing industry-wide customer acquisition costs. As competition rises, CAC continues to escalate, while retention costs remain relatively stable. Therefore, the impact of competition on the retention cost can be much smaller than the impact on the acquisition cost. The current business climate demands more than reactive marketing, it requires a focus on building and maintaining long-term customer relationships. Small and medium enterprises (SMEs), such as local F&B outlets, are particularly vulnerable to this effect and need to adopt smarter, more focused marketing approaches to reduce customer churn and reduce risk of losing major customers (Gil-Gomez et al., 2020). This suggests that investing more in acquisition, without strategic targeting, can be both costly and ineffective.

Retaining customers, therefore, becomes not only a necessity but also a strategic advantage. Without effective retention strategies, businesses risk constantly spending more to acquire customers who may never return. World-leading companies are already taking up new competitive challenges by underscoring the need to focus on managing customer relationships, and especially on customer satisfaction as the main way to survive and maximize revenue. Now SME businesses need to apply effective Customer Relationship Management (CRM). According to Libai et al. (2020), CRM initiatives positively affect customer acquisition, development, and retention, benefiting both the firm and its customers. A successful CRM program can obtain up to 75% return on investment sourced from loyal customers (Kaul, 2017). Given that CRM, in general, aims to increase a firm's customer equity (Libai et al., 2020), this study will emphasize CRM's direct role in improving satisfaction and ultimately retention, two core indicators of marketing efficiency and sustainability in competitive environments.

This finding narrows the strategic focus from a broad loyalty problem to a retention-specific challenge rooted in CRM gaps. CRM is not a single operational tool but a multidimensional construct that integrates people, processes, strategies, and technology to attract, maintain, and enhance customer relationships. Empirical evidence by Sofi et al. (2020) demonstrates that key CRM dimensions consisting of customer orientation, knowledge management, and technology-based CRM, have a significant and positive relationship with customer satisfaction in the hospitality sector. The authors also acknowledged that future studies may extend the framework by exploring additional relational or contextual factors to capture CRM's evolving nature across industries.

Building on this validated model, the present research adopts these dimensions as the conceptual foundation for assessing CRM effectiveness, where structural gaps in relationship management are similarly evident.

2. Literature Review

2.1 Customer Satisfaction

Customer satisfaction is the evaluation of how well a product or service meets or exceeds customer expectations (Kotler & Keller, 2022). It reflects the comparison between pre-purchase expectations and post-purchase experience, where higher congruence leads to stronger satisfaction and loyalty. Recent studies confirm that satisfaction remains a critical determinant of customer retention and long-term business performance. Satisfied customers not only repurchase but also act as unpaid promoters through positive word-of-mouth, strengthening brand

reputation and loyalty (Hapsari et al. 2020). Recent studies also confirm that satisfaction remains one of the most reliable predictors of customer loyalty and repurchase intention, particularly in service and hospitality industries (Sofi et al., 2020). Moreover, meta-analytic evidence shows that customer satisfaction consistently mediates the relationship between customer experience and behavioral outcomes such as loyalty and brand advocacy (Loureiro et al., 2021). Hence, maintaining high customer satisfaction is essential for sustaining customer retention and long-term business performance.

2.2 Customer Relationship Management (CRM)

Customer Relationship Management (CRM) is a strategic approach that integrates marketing, sales, customer service, and information technology to enhance long-term customer relationships and profitability (Buttle, 2015). CRM represents a fundamental component of business model innovation in SMEs, enabling sustainable development and long-term customer relationships, which are critical in the evolving digital economy (Gil-Gomez et al., 2020).

Buttle's CRM Value Chain Model (Picture X) illustrates the key components required for CRM to create long-term customer value and profitability. The model shows that CRM success is driven not only by customer-facing activities but also by the internal conditions that enable these activities to function effectively. These supporting conditions include leadership and culture, people, processes, and information technology. Rather than treating CRM as a set of isolated tools or customer programs, the value chain emphasizes that strong internal foundations are essential for ensuring consistency, integration, and long-term execution.

2.3 CRM Strategy Dimension

The strategic implementation of CRM requires a clear understanding of its core dimensions, each essential for building long-term relationships. According to Kotler & Keller (2022), effective CRM begins with collecting relevant information about each customer in order to achieve customer loyalty. In parallel, Buttle (2015) highlights that CRM is more than just technology; it is a process used in the customer life-cycle stages of acquisition, retention, and development. In view of the wide variance among CRM definitions, Yim (2002) identifies four key areas for successful CRM : (1) strategy, (2) people, (3) processes, and (4) technology.

According to Sin et al. (Sin et al., 2005), CRM is conceptualized as a multidimensional construct composed of four main behavioural components. These components include: key customer focus, CRM organization, knowledge management, and technology-based CRM. Literature findings are also in accordance with the notion that CRM is dependent on people, technology, strategy, and processes (Sofi et al., 2020).

Knowledge management plays a central role in improving CRM effectiveness by enabling firms to collect, store, and utilize customer information to enhance profitability and loyalty (Migdadi, 2021). The firm's ability to maintain systematic, multi-channel engagement and responsive communication with customers has a direct and significant effect on long-term business performance (Alshurideh et al., 2023). Similarly, CRM organization, which refers to the alignment of internal culture, leadership, and processes, has a significant positive impact on overall organizational performance and strengthens the link between technology use and customer satisfaction (Nguyen & Simkin, 2021). Sofi et al (2020) found to exert a positive, albeit weaker, influence on customer satisfaction technology alone does not guarantee CRM success unless complemented by human and process capabilities. Referring to Buttle's CRM Value Chain Model (Picture X), CRM effectiveness relies not only on customer-facing activities but also on strong supporting conditions within the organization that enable CRM initiatives to operate coherently and sustainably. This model underscores that internal organizational readiness forms the foundation upon which all CRM dimensions function.

2.4 Customer Retention and Repeat Behaviour

Madesiya et al. (2024) highlight that excessive choice in the food industry contributes to psychological overload and behavioural volatility among consumers. This phenomenon, known as customer fatigue, diminishes the effectiveness of loyalty strategies and contributes to brand switching. Rehman et al. (2022) found that IMC strategies integrating social media channels create

consistent brand messaging that supports both acquisition and retention. Pol, Harris & van der Veen (2022) found that mapping the customer journey across multiple touchpoints improves marketing efficiency by aligning acquisition and retention strategies. Albérico & Casaca (2022) found that retention strategies are more cost-effective than acquisition, as the cost of acquiring a new customer can be up to five times higher than retaining an existing one. Tuguinay et al. (2023) found that strengthening customer relationships through retention initiatives leads to higher profitability and long-term customer loyalty. Supported by Kaul (2017) states that businesses with strong customer retention strategies can generate up to 75% of ROI from loyal customers, highlighting the strategic role of retention in sustaining marketing impact.

2.5 Partial Least Squares Structural Equation Modeling (PLS-SEM)

PLS-SEM is a variance-based structural equation modelling technique widely used in business, marketing, and management research. It allows researchers to test complex path models combining latent constructs and observed variables, particularly when sample size is moderate, distributional assumptions are less strict, and the research emphasizes prediction. Hair et al. (2022) describe PLS-SEM as a variance-based structural equation modeling technique designed for predictive and exploratory research in business and management. Unlike covariance-based SEM, PLS-SEM is suitable for small-to-medium sample sizes, complex models with multiple latent constructs, and data that do not meet multivariate normality assumptions. It focuses on maximizing explained variance (R^2) of endogenous variables, making it particularly relevant for studies seeking to predict key outcomes such as customer satisfaction or retention in managerial contexts.

3. Research Methodology

3.1. Research Design

This study adopts a quantitative approach to understand how CRM strategy dimensions influence customer satisfaction and, subsequently, customer retention. The dimensions are treated as firm-specific resources, while Customer Satisfaction reflects the performance outcome that indicates how effectively these resources are deployed. Within the CRM dimensions, the three CRM dimensions are directly perceived by customers (CKM, CIM, and IT for CRM) and examined using a quantitative method. These dimensions are measured through a structured customer survey using Likert-scale indicators. Their influence in customer satisfaction is tested using PLS-SEM which provides empirical estimates of the strength and significance of each relationship. This enables the study to identify which CRM practices have the most significant impact on customer satisfaction. This helps validate whether CRM dimensions statistically influence customer satisfaction and provides clarity on *how and why* certain CRM mechanisms succeed or fail in real-world implementation.

3.2. Data Collection

Quantitative data collection methods are further specified as follows:

1. A structured survey aimed at customers who have visited one F&B business in Bandung during the observation period (October – November 2025).
2. The questionnaire will consist of indicators validated constructs in existing literature, including Gil-Gomez et al. (2020), Chatterjee & Srivastava (2022), and Chaithanapat & Rakthin (2021). The questionnaire using Likert-scale of 1-5 with 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree.
3. Each construct will include 9 indicators to measure Customer Knowledge Management, Customer Segmentation, Customer Interaction Management, and IT for CRM. Indicators tested is shown in Table 4.

Table 1. Measurement Indicators for Questionnaire Item

Dimension	Theoretical Base	Measurement Indicator
CKM	Knowledge-Based CRM (Gebert et al., 2003; Chaithanapat & Rakthin, 2021)	Responsiveness, feedback use, innovation
CIM	Service interaction & touchpoint theory (Choudhary & Chauhan, 2023; Kim & So, 2024)	Human, service, ambience
IT CRM	Tech-enabled CRM (Jayachandran et al., 2005; Malki et al., 2024)	System reliability, payment, digital convenience

Each construct is measured using nine indicators distributed across three CRM dimensions. These indicators represent key aspects of CRM implementation, namely responsiveness, feedback use, innovation, human interaction, service quality, ambience, system reliability, payment convenience, and digital accessibility.

3.3 Data Analysis

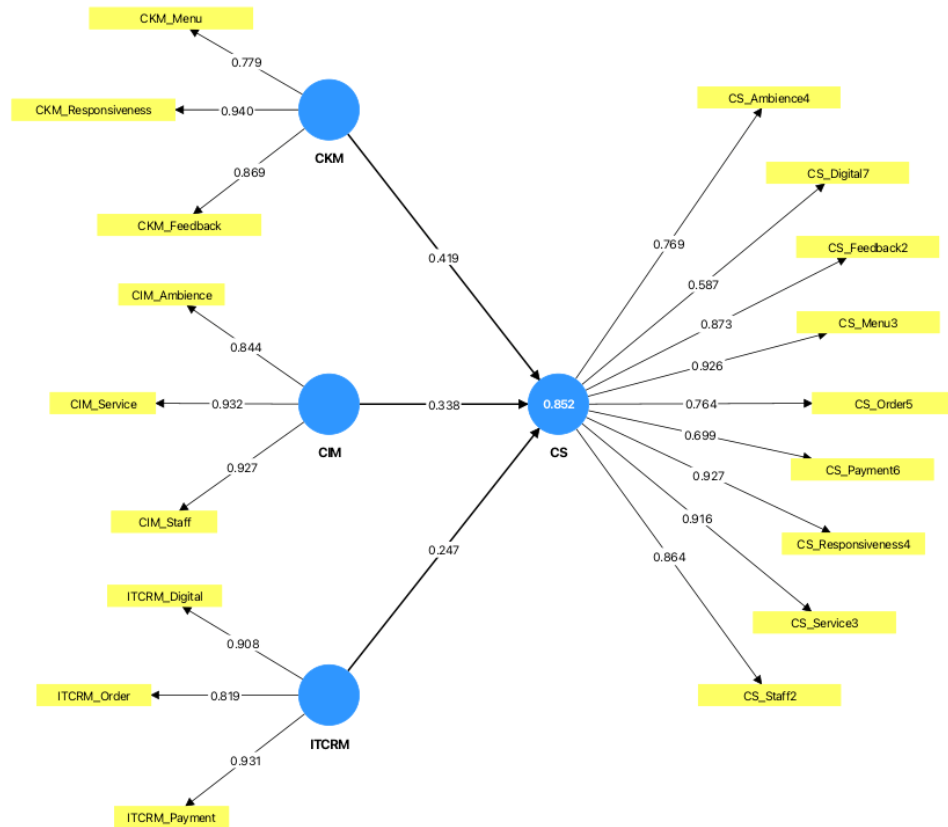
3.3.1 Quantitative Data Analysis

Empirical analysis then used to process collected data to validate the causal relationships proposed under the RBV and VRIO frameworks, demonstrating how internal CRM resources (as strategic capabilities in RBV) are effectively mobilized through the VRIO process stages to generate customer satisfaction and retention outcomes. Key steps include:

1. Reliability Testing (Cronbach's Alpha) to ensure internal consistency of adapted measurement scales (Gil-Gomez et al., 2020; Chatterjee & Srivastava, 2022).
2. PLS-SEM to assess the relationship between CRM dimensions and customer retention indicators from CRM dimensions to customer satisfaction and retention as direct relationship.
3. Transactional data will verify survey-based retention intention using repeat-visit frequency. This strengthens construct validity and reduces perceptual bias.

4. Results and Discussion

The quantitative analysis in this study employs PLS-SEM to examine the relationship among the CRM Dimensions and Customer Satisfaction. The analysis is conducted in two stages : (1) evaluation of the measurement model to assess the reliability and validity of the constructs, and (2) evaluation of the structural model to determine the significance and strength of the relationship among variables.



Picture 1. PLS-SEM Results

Picture 6 illustrates the overall PLS-SEM structural model used in this study. It is showing the relationships between four latent of CKM, CIM, ITCRM, and CS. Each latent variable is represented by multiple reflective indicators, with the numbers displayed on the arrows indicating their respective factor loadings. The paths connecting the CRM dimensions to Customer Satisfaction represent the direct relationships assessed in the model.

4.1 Validity and Reliability Measures

Measurement model evaluation was conducted to assess the reliability and validity of the reflective constructs in the PLS-SEM model. These evaluations are needed to ensure the PLS-SEM model meets the required reliability and validity standards. Accordingly, the evaluation focuses on indicator reliability, internal consistency reliability, and convergent validity, to confirm that the constructs are measured appropriately and are empirically distinct from one another.

Indicator reliability is examined through outer loadings, which evaluate how strongly each indicator reflects its latent variable and are used to determine whether individual items contribute meaningfully to the construct (Hair et al., 2022). Internal consistency reliability was assessed using Composite Reliability (CR), a measure that captures the overall reliability of the indicators within each construct, ensuring they consistently represent the same underlying concept. Convergent validity was evaluated through the Average Variance Extracted (AVE), which reflects the proportion of variance in the indicators that is explained by the latent construct, indicating adequate convergence when constructs explain more than half of their indicator's variance. Together, these assessments confirm that the measurement model demonstrates sufficient reliability and validity and is appropriate for subsequent structural model analysis. The result of the PLS-SEM measurement model of internal consistency reliability are shown in Table 2.

Table 2. Measurement Model of PLS-SEM Model

Construct	Indicator	Outer Loading	Cronbach's Alpha (α)	rho_A	CR	AVE	Thresh old (Hair et al., 2020)	Status
CKM	CKM_Menu	0.779	0.829	0.840	0.898	0.74	>0.70	Reliable
	CKM_Responsiveness	0.94						
	CKM_Feedback	0.869						
CIM	CIM_Service	0.844	0.885	0.896	0.929	0.813		Realiable
	CIM_Staff	0.932						
	CIM_Ambience	0.927						
ITCRM	ITCRM_Digital	0.908	0.864	0.917	0.917	0.787		Realiable
	ITCRM_Order	0.819						
	ITCRM_Payment	0.931						
CS	CS_Ambience4	0.769	0.938	0.958	0.948	0.674	Highly Reliable	
	CS_Digital7	0.587						
	CS_Feedback2	0.873						
	CS_Menu3	0.926						
	CS_Order	0.764						
	CS_Service3	0.916						
	CS_Payment6	0.699						
	CS_Responsiveness4	0.927						
	CS_Staff2	0.864						

As shown in Table 2, indicators fall within the acceptable range based on Hair et al. (2022). This threshold reflects substantial item reliability and demonstrates that the indicators adequately represent the underlying construct. Internal consistency is also well supported as reflected in the Cronbach's Alpha, rho_A, and CR values, all of which surpass the minimum criterion of 0.70. These results demonstrate that the items within each construct are stable and coherent in capturing the same underlying concept. Convergent validity is further confirmed by the AVE values with the threshold of 0.50, indicating that each construct explains more than half of the variance of its indicators. CS shows particularly strong measurement properties due to its larger number of consistently performing indicators.

Overall, these findings provide robust evidence that the reflective constructs meet the required reliability and validity standards, allowing the analysis to proceed confidently to the structural model evaluation.

4.2 Structural Model Evaluation

After establishing that the measurement model meets the required reliability and validity criteria, the analysis proceeds to the evaluation of the structural model to assess the relationships among the latent constructs. This stage examines the predictive capability of the model by analyzing the magnitude and significance of the path coefficient, the effect size (f^2) of each predictor, and the explained variance (R^2) of the dependent construct.

The path coefficient (β) indicates the strength and direction of influence among constructs, while the associated t-values and p-values obtained through bootstrapping determine whether these relationships are statistically significant or merely occur by chance.

These results provide empirical evidence regarding the extent to which each CRM dimension contributes to customer satisfaction and help determine the relative importance of each construct within the model.

Table 3. Path Coefficients Results

Path	β (Coefficient)	t- value	p-value		
		value	Threshold ($t \geq 1.96$)	value	Threshold ($p < 0.05$)
CKM → CS	0.419	4.121	Met	0.000	Significant
CIM → CS	0.338	2.729	Met	0.006	Significant
ITCRM → CS	0.247	3.074	Met	0.002	Significant

Table 3 shows the result of the path coefficients of the PLS-SEM model. The analysis of path coefficients provides insight into the strength and direction of the relationships between the CRM dimensions and Customer Satisfaction

4.3 Relationship between CKM and CS

The relationship between Customer Knowledge Management (CKM) and Customer Satisfaction (CS) is positive, as reflected in the path coefficient of $\beta = 0.419$. This value represents the strongest directional influence among all CRM dimensions in the model, suggesting that improvements in CKM are associated with substantial increases in customer satisfaction. This suggests that improvements in CKM are associated with increased customer satisfaction, indicating a theoretically meaningful direction of influence. The statistical tests further support this relationship, with a t-value of 4.121, exceeding the minimum threshold of 1.96, and a p-value of 0.000, which is well below the 0.05 significance level. These results confirm that the effect of CKM on customer satisfaction is not only theoretically meaningful but also empirically reliable.

This pattern indicates that CKM consistently enhances customer satisfaction across respondents. The very high t-value and near-zero p-value indicate that customers have a stable and uniform perception of CKM-related practices, suggesting that efforts to understand customer preferences, manage feedback, and respond to their problems are recognized and valued by a broad range of customer segments. Such consistency suggests that CKM is effectively implemented and perceived as an integral part of the service experience.

These findings align strongly with prior studies such as Sofi et al. (2020), which found that knowledge-oriented CRM practices significantly enhance customer satisfaction when organizations actively gather, analyze, and utilize customer information to inform service delivery. Their study also highlights that effective CKM not only improves satisfaction but also strengthens the likelihood of repeat visits and long-term loyalty, as customers tend to reward businesses that clearly understand and respond to their individual needs. The alignment between the current results and the literature implies that CKM successfully contributes to shaping positive customer experiences.

As shown in Table 2, within the CKM construct, the highest outer loading is observed for CKM Responsiveness (0.940), followed by CKM Feedback (0.869) and CKM Menu (0.779). This pattern suggests that customers primarily perceive CKM most strongly when the firms responds to problems or complaints quickly, provides clarifications, and engages directly with their inquiries. These strengths suggest that knowledge-related practices are both visible and meaningful to customers. To further enhance this impact, the firms can continue strengthening its mechanisms for capturing customer insights, refining preference-based personalization, and ensuring consistent feedback integration across service operations.

4.4 Relationship between CIM and CS

Referring to Table 2, the indicators for Customer Interaction Management (CIM) show very strong item reliability. CIM Staff (0.932) demonstrates the highest loading, followed closely by CIM Ambience (0.927) and CIM Service (0.844). These results suggest that customers perceive CIM most strongly through direct interpersonal interactions, particularly staff professionalism, friendliness, and their overall responsiveness during the dining experience. Ambience-related interactions also contribute substantially, indicating that both human and contextual elements play important roles in shaping customer perceptions of interaction quality.

The path analysis results (Table 8) further confirm the importance of CIM, with a path coefficient of $\beta = 0.338$, indicating that improvements in customer interaction practices lead to higher customer satisfaction. The statistical evidence fully supports this relationship with t-value of 2.729 exceeding the 1.96 threshold, and the p-value of 0.006 confirms strong significance at 5% level. The significance of CIM suggests that interaction quality is not only noticeable but also reliably valued by customers. The high t-value indicates relatively stable perceptions across different customer segments, implying that customers generally experience consistent interaction standards, regardless of visit timing or staff assignment. Nonetheless, minor variability may still arise due to fluctuations in service intensity, differences in staff communication styles, or varying customer expectations, but these variations do not undermine the overall significance of the relationship.

These findings align with prior literature. Sofi et al. (2020) highlight that customer interaction, especially communication quality, staff attentiveness, and warmth, is among the strongest predictors of satisfaction in service-driven businesses. The significance of CIM in this study is consistent with these insights, indicating that customers recognize and appreciate the consistency and warmth of the team's interpersonal service delivery. Strengthening CIM practices will not only enhance the stability of CIM's effect but may also elevate overall satisfaction outcomes in future evaluations.

4.5 Relationship between ITCRM and CS

The third latent variable, ITCRM, also demonstrates strong item reliability as shown by its indicator loadings (Table 2). Among its indicators, ITCRM Payment (0.931) and ITCRM Digital (0.908) show the highest loading, followed by ITCRM Order (0.819). These values indicate that customers perceive ITCRM most strongly through the technological touchpoints they directly interact with, particularly smooth digital payment processes or online platforms and digital services. This suggests that customers' evaluation of ITCRM is shaped primarily by digital convenience and seamless transaction-related interactions, while order-processing functions play a comparatively less dominant role, although still relevant.

The relationship between ITCRM and Customer Satisfaction (CS) shows the smallest path coefficient among the three CRM dimensions, with $\beta = 0.247$. This suggests that, although improvements in technology-enabled CRM practices contribute positively to customer satisfaction, their directional influence is more modest compared to interaction-based (CIM) or knowledge-based (CKM) practices. This pattern may reflect the nature of digital touchpoints, which typically deliver functional and efficiency-related benefits rather than emotional or relational value, making their incremental impact on satisfaction meaningful but not dominant.

ITCRM achieves full statistical significance in the model with t-value of 3.074 that exceeds the 1.96 threshold, and the p-value of 0.002 is well below the 0.05 significance level, indicating that the relationship is both consistent and statistically reliable. This suggests that while ITCRM's influence on satisfaction is not as large as the other dimensions, it is comparatively stable across customers. Such stability may arise because digital touchpoints offer standardized and uniform experiences, making them less susceptible to variations in staff behavior, store conditions, or customer-specific factors.

This finding aligns with prior literature. Malki et al. (2024) demonstrate that CRM effectiveness is significantly strengthened when supported by technology, particularly through integrated digital systems, seamless communication platforms, and efficient online service processes. Their study highlights that when firms incorporate technology into their CRM processes, customers experience greater convenience, faster responses, and more seamless interactions, all of which strengthen satisfaction. In line with this evidence, technology-enabled CRM features appear to

provide customers with functional efficiency and ease of service that contribute to higher satisfaction.

To further strengthen the impact of ITCRM, small businesses could focus on enhancing system responsiveness, minimizing digital friction points, and expanding digital integration across additional customer touchpoints, such as personalized digital promotions or automated feedback mechanisms. These improvements could reinforce the consistency of digital experiences and potentially increase ITCRM's effect size in future evaluations.

4.6 Effect Size Analysis

Table 4. f^2 of each Latent Variables

Path	Effect Size (f^2)	Threshold (Hair et al., 2020)	Status
CKM \rightarrow CS	0.175	0.02 = small	Medium
CIM \rightarrow CS	0.128	0.15 = medium	Small
ITCRM \rightarrow CS	0.225	0.35 = large	Medium

The results show that CKM \rightarrow CS yields an effect size of 0.175, placing it within the medium category. This indicates that CKM contributes meaningfully to enhancing the model's predictive accuracy and provides a substantial incremental effect on satisfaction. In contrast, CIM \rightarrow CS has an effect size of 0.128, placing it in the small category and indicating that customer interaction practices contribute less to improving the model's predictive power compared with the other CRM dimensions. Finally, ITCRM \rightarrow CS demonstrates an effect size of 0.225, which is also classified as medium. This highlights that technology-enabled CRM practices play a considerable role in increasing the model's explanatory power and contribute a stronger incremental effect than CIM.

Overall, the f^2 analysis suggests that CKM and ITCRM provide meaningful incremental improvements to the model's predictive power, indicating that knowledge-based and technology-enabled CRM practices play comparatively stronger roles in shaping customer satisfaction. In contrast, CIM offers only a small contribution, implying that while customer interactions do influence satisfaction, their ability to enhance the model's explanatory strength is more limited. These results imply that improvements in CKM and ITCRM are likely to yield more substantial gains in satisfaction outcomes, whereas enhancements to CIM may deliver more modest effects.

5. Conclusion

Findings from the PLS-SEM model show that all three CRM dimensions consist of Customer Knowledge Management (CKM), Customer Interaction Management (CIM), and IT-CRM, positively influence customer satisfaction. CKM demonstrates the strongest effect, while IT-CRM the weakest. Overall, the research findings confirm that strengthening CRM capabilities, particularly CKM, IT-CRM, and internal organization, is essential for enabling Palari to convert positive customer experiences into sustained retention and long-term competitive advantage.

References

- Albérico, R., & Casaca, J. (2022). Relationship Marketing and Customer Retention - A Systematic Literature Review. *Studies in Business and Economics*, 18(3), 44-66.
- Alshurideh, M., Kurdi, B., & Salloum, S. (2023). Customer relationship management and customer retention in service industries: An integrated model. *International Journal of Data and Network Science*, 7(2), 789-798.
- Bandung Tourism and Culture Office. (2023). *Annual F&B Industry Report*. Bandung.
- BPS Jawa Barat. (2023). *Population and Economic Growth Statistics*.
- Buttle, F. (2015). *Customer relationship management: Concepts and technologies (2nd ed.)*. Butterworth-Heinemann.
- Euromonitor International. (2023). *Consumer foodservice in Indonesia: Market performance and competitive landscape [Market research report]*. Euromonitor Passport Database.
- Gil-Gomez, H., Guerolla-Navarro, V., Oltra-Badenes, R., & Lozano-Quilis, J. A. (2020). Customer relationship management: digital transformation and sustainable business model innovation. *Economic Research - Ekonomiska Istrazivanja*, 33 (1), 2733-2750.

- Hair, J., Hult, G., Ringle, C., & Sarstedt, M. (2022). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage Publishing.
- Hapsari, R., Clemes, M., & Dean, D. (2020). The impact of service quality, customer engagement, and satisfaction on airline loyalty. *Journal of Air Transport Management*, 89.
- Kadin Bandung. (2023). *Survei Perilaku Konsumen F&B di Bandung [Laporan Internal]*. Bandung: Kamar Dagang dan Industri Indonesia.
- Kaul, D. (2017). Customer Relationship Management (CRM), Customer Satisfaction and Customer Lifetime Value (CLV) in Retail. *Review of Professional Management*, 15(2), 55-60.
- Kotler, P., & Keller, K. (2022). *Marketing Management*. Pearson Education.
- Libai, B., Bart, Y., Gensler, S., & Hofacker, C. (2020). Brave New World? On AI and the Management of Customer Relationships. *Journal of Interactive Marketing*, 13.
- Loureiro, S., Bilro, R., & Japutra, A. (2021). Customer experience and its outcome measures: A meta-analytic approach. *Journal of Retailing and Consumer Services*, 61.
- Madesiya, A., Kumar, R., & Gupta, S. (2024). Exploring the Role of Psychology in the Food Industry: Consumer Behavior, Decision Fatigue, and Cognitive Bias. *International Journal of Food Studies*.
- Migdadi, M. (2021). Knowledge management, customer relationship management and innovation capabilities. *Journal of Business and Industrial Marketing*, 36(1), 111-124.
- Min, S., Zhang, X., Kim, N., & Srivastava, R. (2016). Customer Acquisition and Retention Spending: An Analytical Model and Empirical Investigation in Wireless Telecommunications Markets. *Journal of Marketing Research*, 53(5), 728–744.
- Nguyen, B., & Simkin, L. (2021). The dark side of CRM: Advantaged and disadvantaged customers. *Journal of Consumer Marketing*, 34(4), 271–284.
- Pol, P., Harris, F., & van Der Veen, R. (2022). Customer Journey Mapping in an Omnichannel Context: A Narrative Review. *Sustainability*, 14(9), 5532.
- Rehman, S., Bhatti, A., Hussain, M., & Ahmad, M. (2022). Developing the Integrated Marketing Communication (IMC) through Social Media: A Customer Engagement Perspective. *SAGE Open*, 12(1), 1-13.
- Sin, L., Tse, A., & Yim, F. (2005). CRM: conceptualization and scale development. *European Journal of Marketing*, 38(11), 1264-1290.
- Sofi, M., Bashir, I., Parry, M., & Dar, A. (2020). The effect of customer relationship management (CRM) dimensions on hotel customer's satisfaction in Kashmir. *International Journal of Tourism Cities*, 6(3), 729-750.